Georgia Technology Authority

State of Georgia
Portal Interface Vision

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Definition

The term *interface* as it relates to the State of Georgia portal describes the intersection of technology (the portal middleware) with a human (the constituent). The term is used intentionally broadly and is not confined solely to a specific implementation such as a web page.

Key concepts associated with an interface include *brand*, *language*, *metaphor*, and *taxonomy*. *Brand* in the context of the portal refers to the development of an identity for the portal that abstracts the technology behind it in order to make it comprehensible to a non-technical person. The *language* of the portal represents both the linguistic and cultural aspects of interaction with the user. The *metaphor* of the portal is used to describe the method for physical interaction between the portal technology and the user, such as clicking on a hyperlink. *Taxonomy* is used to broadly describe the mapping of technology resources to those that more closely align with a human's natural mechanisms for organization and hierarchy.

Vision

Brand

The State of Georgia must develop a brand for the portal that is powerful enough that it can completely abstract the technology and policies that the portal is actually built upon. Brands are a part of everyday life for our constituents. Consider for a moment a shopping list for the grocery store. It is likely that the list probably has items on it identified by brand rather than function. Instead of writing "detergent" and "cola-flavored soda" one instead may write "Tide" and "Coke". Our associations with these brands are extremely powerful, which is why advertisers spend so much money on commercials that mix positive images with their products.

Because the purpose of the State of Georgia portal incorporates so many ideas and concepts, it will be important to abstract this into a brand that can be used to represent those things to our constituents more simply. One of the primary reasons for creating this new mode of interacting with government is that there is a general perception that government service is not on par with premier service organizations in the private sector. United Parcel Service (UPS) and Home Depot, Georgia based corporations have seen a tremendous upsurge in the perceptions of service associated with their brands as a result of investments in technology to serve their customers. It is hoped that introduction of a new brand for Georgia's government services in concert with new investments in service oriented processes will bring improved perception of public service levels by the state.

An additional challenge is that most of our constituents are also citizens and so actually "own" what it is we are trying to create. The brand of the State of Georgia portal becomes their association of what their own government is. The brand must therefore reflect our citizens and the environment we all share. One only needs to consider the

controversy over changing the state flag to understand that citizens feel that any symbolic representation of the state also represents them. This will pose a particular challenge for the development of a single brand for the State of Georgia portal since a citizen doesn't have an ability to choose another brand instead.

Finally, the brand of the State of Georgia must be appealing enough that state agencies are willing to give up a certain degree of their own organizational identities for the greater single State of Georgia identity. It is not the goal of the State of Georgia portal to remove organizational identity altogether. The enterprise of the State of Georgia is simply too large for all state employees to give up individual agency identities. The goal will be, however, to minimize these tribal identities in order to serve our common constituents better.

Language

Linguistic and cultural differences among our constituency will require that the portal support multiple presentation layers depending on the user. Most immediately, the need for Spanish-language versions of at least some State of Georgia resources has been discovered. Additionally, the wide variation in linguistic capabilities of our constituents must be accounted for if we are to effectively serve them.

Technology may provide some solutions to these problems. Automatic language translation is clearly an option, but it raises serious concerns about the potential for information to actually be lost and possibly inverted. Liability associated with giving the wrong information to a constituent must be avoided at all costs. While this technology is clearly improving, it is not perfect today.

Our constituents also come from a wide spectrum of educational backgrounds. Presenting all information at the lowest common denominators of literacy levels risks alienating other constituents. We must recognized that the language used to present information to someone seeking social services may be different than that used when presenting information to a physician.

In order to assure that language used in the content of the state's portal reflects an understanding of the state's customers and reflects a consistent level of professionalism there will need to be established guidelines and standards for content that agencies should follow.

Finally, the services provided through the portal must share a tonal quality that does not insult our constituency. In an eagerness to ensure that rules are followed, some existing forms and websites have presented content that does not show an appropriate level of respect for constituents. For example, text that is presented in bold and with dozens of trailing exclamation points may offend those constituents who follow the rules as a matter of course.

Metaphor

The actual union point between a person and technology is a particular challenge for the State of Georgia portal. For example, a common metaphor for manipulation of a computer screen is to move a mouse over an object and then to click on that object in order to do something with it. While this metaphor is second nature now to a person who uses a PC everyday, many of our constituents have never had the reason to learn it. It has only been since 1984, with the introduction of the Macintosh, that the mouse began to enter the mainstream computer market.

Interface metaphors are almost always device specific, so our strategy must address them in this way. It's become very clear that the metaphors one uses to manipulate a web page on a PC will not translate to small form-factor devices such as cell phones and personal digital assistants. Further complicating matters is that the environment of the device dictates the best metaphor to use. For instance, although our kiosks throughout the state technically are just web browsers, because a person is standing in a public place to use it, it will require an interface metaphor optimized for that environment. Also, persons of differing physical abilities may require different metaphors in order for the portal to serve their needs.

Metaphors for the manipulation of technology also evolve over time. A microwave oven, for example, was once manipulated in much the same way a conventional oven was, with knobs and dials. Today, almost all medium and large microwave ovens feature elaborate keypads and digital displays. We can expect that the metaphors that make up the interface to the State of Georgia portal will also change over time. While today we may focus on standardization for the location of navigation links within a web browser, over time we will likely also have to consider standardization of things such as voice recognition systems to the portal.

Metaphors also abstract non-interactive concepts. For example, a driver knows the meaning of a traffic light regardless of where the traffic light is: green always means go, red always means stop, and yellow always means slow down and prepare to stop (or, perhaps, speed up and keep going). These ideas should be incorporated into the State of Georgia portal as well. For example, many functions within the portal will involve multiple steps in order to complete a process. The organization and display should provide the same easy-to-understand cues regardless of what the process is. Perhaps all multiple step processes could share a progress meter that quickly indicates to the user where they are within a process, as an example. Non-interactive metaphors must also take into account cultural differences among constituents that may require the development of multiple thematic representations.

Although metaphors are necessarily different on different devices, in different environments, and over time, there is still considerable opportunity for standardization. The smokestack approach to web development to date has produced so many different interface paradigms that constituents are likely to be confused as they move from one state web site to another. Our vision is to standardize these into a smaller subset of

interaction metaphors over the next three years so that a constituent can easily understand what he or she is doing regardless of the function.

Taxonomy

The technology of the portal must be organized in such a way that is optimized for machines. Because our constituents are not machines, the portal must be organized in a way that more closely aligns with our human abilities to organize. Taxonomy in terms of the State of Georgia portal is the process of organizing resources in a human rather than a technical way.

The most common example of taxonomy for a portal is that used by yahoo.com. As one of the earliest commercial web sites, Yahoo! has the advantage of growing along with the internet, carefully organizing web sites so that a person can drill into a subject matter until the desired web sites are located. This is an enormous task and requires skilled librarians to ensure that sites are organized in a consistent manner.

The State of Georgia portal must also organize its content into taxonomies that support the constituents who use it. There are at least three major taxonomies that must be developed in order to support the functions of the portal:

- Organizational
  Taxonomy that takes the existing State of Georgia organization and maps it into a single hierarchy. This taxonomy is important for maintaining individual agency identity, associating functions to physical office locations, and for intranets.
- Community of Interest
  Taxonomy that maps constituents with common needs (drivers, teachers, parents, etc.) to those services that support those needs. This taxonomy is important for beginning the process of personalizing the portal to meet the needs of an individual constituent and also for supporting public devices such as kiosks.
- Intention
  Taxonomy that maps the intention of a constituent (get a child into school, become a driver) to those processes that fulfill these intentions. This taxonomy represents the fulfillment of personalization so that the portal uniquely serves the needs of an individual.

Not only must these taxonomies be developed for the State of Georgia portal, they also will need to be rigorously maintained and updated. If the taxonomies do not stay aligned with those resources that they connect to, constituents will see no benefit of an enterprise portal.

Regardless of the abilities of solutions such as Customer Relationship Management software, technology alone cannot solve the taxonomy problem. It will always require a human to make the connection that a particular service provided by technology maps to a need that a constituent has. Our vision will be to facilitate the development of these taxonomies and to put into place a mechanism for ongoing support of them.

Tasks

We can expect that it will take fully three years to implement the vision of the portal interface. In order to move from where we are today to our vision, many steps will be required. The implementation of the interface in many, but not all, cases will be tied to the technical implementation of the portal architecture. Some of these tasks can be combined into single pilot projects where appropriate:

Brand

- Validate the branding methodology
- Define the constituents of the brand
- Conduct market research and focus groups with the constituents to develop brand concepts
- Develop creative support for the brand (logos, mascots, etc.)
- Validate the brand developed through further focus groups
- Gain internal buy-in for the brand from state agencies
- Establish branding standards to ensure it does not become diluted by poor service delivery
- Prepare a campaign to launch the brand
- Launch the brand to the world
- Determine effectiveness of brand
- Iterate through these steps using lessons learned

Language

- Define our constituents in terms of language, literacy and culture
- Prototype interface that supports multiple presentation layers that support linguistic differences of constituents
- Evaluate the use of automatic language translation
- Develop ongoing relationships with constituencies of different languages, literacy and cultures for feedback
- Develop policies to define at which point new languages are introduced
- Establish grammatical guidelines for content and services owned by individual agencies.
- Unite peers in agencies to establish common tonal quality to content presented through portal
- Conduct usability testing

Metaphor

- Conduct extensive research into interface metaphors that are considered best-of-breed
- Define our constituents in terms of location and device

- Develop guidelines for determination of which devices should be supported by the portal
- Define navigational prototypes based upon device and location of use
- Create relationship with academic community to inform development of interface metaphors
- Conduct usability testing of prototypes
- Iterate and evaluate constantly to ensure that metaphor works
- Conduct pilot, using GTA as the model, to define and develop short-term standards for agencies to follow for navigational needs

Taxonomy

- Further define the three taxonomies (organization, community of interest, intention)
- Identify existing resources that already define these taxonomies
- Create working group to develop organizational hierarchy
- Develop LDAP directory of organizational hierarchy
- Charge organizational entities with mapping physical office locations to organizational hierarchy
- Adopt GIS system that centrally maps locations through portal
- Create master working group to define major communities of interest
- Map state services through a community of interest hierarchy in enterprise portal view
- Adopt ad-hoc public/private partnerships to identify state services that serve individual communities of interest
- Integrate self-identification as a member of a community of interest into the portal personalization
- Create mechanism for procurement requests to identify communities of interests that are served by new IT services
- Implement means of displaying community of interest oriented material into user interaction with portal
- Create central repository of processes that fulfill constituent intentions
- Map processes to services
- Create central standard mechanism of indicating progress through a process to a constituent
- Implement Customer Relationship Management software that leads constituents to anticipated process needs